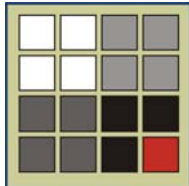


Social and Economic Assessment for Michigan's State Forests

**Prepared for: Michigan Department of Natural Resources
Forest, Mineral, and Fire Management Division
Lansing, Michigan**

September 5, 2006



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Preface

Public Act 125 of 2004, Section 52505, requires the Michigan Department of Natural Resources (MiDNR) to seek and maintain third-party sustainable forestry certification. Forest certification requires that MiDNR forest management plans take into consideration social and economic parameters that affect future forest management operations. Currently, the MiDNR is preparing a statewide forest management plan, and each of three eco-teams are drafting ecoregional management plans. The social and economic information provided in this report will be used to assess current social and economic conditions and to develop future management directions within each of the plans.

The report focuses primarily on three ecoregions: the Western Upper Peninsula, Eastern Upper Peninsula, and Northern Lower Peninsula as defined by the MIDNR along county boundaries. It covers social and economic conditions within these ecoregions in aggregate and on a county-level basis. As a result data for the areas in and around Michigan state forests are highlighted.

The “Social and Economic Assessment for the Michigan National Forests” (July 25, 2003), by Larry Leefers, Karen Potter-Witter, and Maureen McDonough from Michigan State University, provides a general model for this report.

The assessment report is based on secondary data. No primary data collection was done. MiDNR personnel provided unpublished data from MiDNR records. The report presents analyses of existing data and discusses relationships and trends in the variables of interest, and contains some projections based on existing literature.

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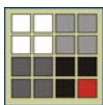
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Chapter 3. MI DNR Relationships with Communities

Introduction

The MiDNR and other natural resource agencies interact with communities to understand issues of mutual interest and to implement programs for management of natural resources. The interactions of agencies and communities is a widespread phenomenon (McDonough et al. 1999, Leefers et al. 2003). Intergenerational sustainability of ecosystem functions and processes that support productive biological systems is desired by the MiDNR and citizens of Michigan. Sustainability in the context of human communities is central to this view.

The draft 2006 State Forest Management Plan (2006) lists three goals related to communities

- To maintain essential ecosystem services,
- To sustain social-economic values, and
- To provide public access.

These three goals require the interaction of the MiDNR and various communities. Three objectives related to providing public access are: provide recreational opportunities, provide educational opportunities, and allow for cultural uses. This chapter draws on Leefers and others (2003) for its structure and part of its content. It provides an overview of communities of interest, acceptance of perceived natural resource changes, community capacity and well being, and institutional and other relationships.

Communities of interest

Communities of interest can be classified as place-based or affiliation-based (Leefers et al. 2003). For example, towns in close proximity to state forests are places that have geographic proximity to natural resources of interest—forests, lakes, rivers, and so on. In other cases, people may be affiliated due to common interests in hunting, fishing, horseback riding and other activities, even if they are not near state forests. Whether they are in close proximity to forests or they are linked to the forest due to interests, these citizens are affected by state forest management, and they have a stake in how state forests are managed.

Communities of interest may be statewide and/or specific to certain ecoregions (Appendix Table A3.1). For purposes of this report, we have classified communities of interest under 14 major categories (Table 3.1). The list is not exhaustive, but provides a good cross-section of the types of organizations with an interest in state forest management. Recreation-related organizations and local governments are most numerous. Given the myriad of forest-based recreation activities in Michigan, the proliferation of local communities of interest with a focus on specific wildlife habitats, hunting opportunities, recreational trails and other interests is expected.

Statewide communities include international organizations, federal agencies, Tribes, multi-state organizations, other state agencies, universities, statewide recreation and other user groups, conservation and environmental groups, and non-governmental organizations. Local communities specific to ecoregions include counties, local units of government, local chambers of commerce and regional/local groups similar to those existing at the state level. In addition, there are local permanent residents and seasonal residents. Forest landowners, whose lands are often interspersed with state forest lands, form local communities of interest and may be permanent or seasonal residents.

Table 3.1. MiDNR-identified communities of interest by category.

Type of Organization	Number of Organizations
International and Federal Government	12
Tribal Governments/Organizations	17
Multi-State Government	13
Local Government	78
Universities	12
Research, Development, and Extension	3
Forestry	26
Energy	2
Recreation	156
Conservation	16
Environmental	9
Water Resources	26
NGOs-Other	12
Media	2

Source: Appendix Table A3.1.

Acceptance of perceived natural resource changes

Communities of interest focus on many natural resource activities, conditions and issues. They are interested in the *status quo* as well as potential changes in natural resources. Research has not been completed that is specific to perceived natural resource changes for each ecoregion, but several studies provide insights to views managers will face when they propose changes in resource programs. Relevant studies include Kakoyannis, Peterson and Steffens (1999), Carr and Halvorsen (2001), Leatherberry (2003), Moser and others (2005), Clendenning, Field and Kapp (2005), McDonough (1999), and Peterson (1999).

Perceptions of the importance of natural resources

Natural resource features affect why people live in an area and visit it. People enjoy the peace, quiet and tranquility of northern Michigan, the opportunity to be close to nature, and scenic beauty (Kakoyannis et al. 1999). In the WUP, researchers found that there was widespread recognition of the contributions public forests made to the quality of life in their communities (Carr and Halvorsen 2001). In addition, people wanted to maintain the undeveloped character of the area, have a sustainable economy, and retain access to the forests. Finally, there was recognition of the importance of encouraging forest-based economic development. Citizen participation was viewed as critical to the success of agencies pursuing sustainable management.

Personal values related to natural resources were explored in a study of the EUP (Kakoyannis, Peterson and Steffens 1999). Respondents noted that water quality, air quality, and scenic beauty were among the top UP characteristics that they rated as “very important.” Access to public lands and water and outdoor recreation opportunities were also important characteristics. Respondents were more satisfied with the natural resource-related characteristics than they were with components of the human environment (e.g., taxes, health care facilities, school quality, job opportunities, etc.). Seasonal visitors (non-residents) assigned higher levels of importance to amenities, whereas permanent residents focused more on the human environment as important characteristics (e.g., jobs were more important for them). Lack of development and large tracts of public lands contribute to the attractiveness and appeal of the UP.

The National Woodland Owners Survey, completed in 2001, provides some insights regarding family woodlot ownership in the Lake States (Leatherberry 2003). Over one quarter of the land owned is held by people 70 years

old or older, and almost half of the family-owned forestland has been owned for at least 25 years. Most people own forestlands for values related to the quality of life (a homestead, a place for recreation, etc.). In the nearby states of Indiana, Illinois, and Iowa, researchers found that farm woodlot owners interested in income potential generally had higher timber volumes on their woodlots, owners interested in aesthetics had well-stocked stands with larger trees, and owners who were interested in timber management and wildlife tended to have the highest number of timber species present (Moser et al. 2005). In essence, their views on natural resources were reflected in their timberland holdings.

A recent survey of landowners in northwestern Wisconsin compared attitudes toward wildlife management between seasonal homeowners and permanent residents (Clendenning et al. 2005). They emphasized the growth of seasonal and recreational homes in northern Wisconsin and elsewhere where there are good amenity characteristics (clearly the situation in northern Michigan). The authors noted that migration into these areas came from four streams: retirees seeking a rural lifestyle, younger newcomers seeking a slower pace of life, professionals who can commute to work or work remotely, and seasonal homeowners. For many of the newcomers, preservation of amenities that drew them to the area were important. Longer term residents, as noted in the EUP, were supportive of economic development that will provide opportunities for themselves and their children. Part of the attraction of northern areas is that they have characteristics that are not as common in their urban environment (e.g., forest, rivers, access to recreation areas, etc.). Consequently, seasonal homeowners are more supportive of land use controls. Longtime residents are more supportive of managing public lands for hunting than newer residents. But both groups are supportive of endangered species protection and wilderness values. People raised in an urban environment were less supportive of hunting than those raised in rural areas or small cities. Thus, stakeholders' perceptions of natural resources depend, in part, on their personal histories.

In some cases, state forest users and others enjoy recreational activities, but cross the boundary between legal and illegal use of the natural environment. In many cases, these activities lead to citations from the MiDNR (Table 3.2). The majority of citations in 2004 were given out in the NLP. Fish and wildlife citations were most common, followed by ORV citations. Overall, the lowest number of citations issued over the 1995-2004 period were in 2004 (Appendix Table A3.2).

Table 3.2. Distribution of DNR-issued citations by ecoregion and statewide by type, 2004.

Ecoregion	Total citations	Wildlife	Fish	Land& water	Snow-mobile	Marine	ORV	Environ-mental	Gen. Criminal /Other
WUP	1,462	24.3%	18.9%	9.7%	18.5%	6.5%	17.8%	0.5%	3.8%
EUP	510	30.0%	18.6%	7.1%	22.4%	5.9%	14.5%	0.4%	1.2%
NLP	7,733	17.6%	21.1%	19.7%	12.9%	5.1%	19.0%	0.5%	4.0%
State	14,944	19.4%	25.3%	14.7%	11.9%	7.5%	16.5%	0.5%	4.2%

Source: Appendix Table A3.2

Perceptions of change

Natural resource managers deal with change on a regular basis. As a part of the EUP study (McDonough 1999), residents were asked about their perceptions of change (Figure 3.1). Several natural resource-based attributes were viewed as being largely unchanged over the past five years (Peterson 1999). Scenic beauty, water quality, air quality and access to public lands and water were viewed by most respondents as unchanged. Fishing quality, on the other hand, was viewed as decreased by the majority of respondents, and residents interviewed voiced concerns about increasing deer populations. Many attributes associated with development (e.g., traffic, hotel/motel dev., etc.) were viewed as increasing over the five-year period. Residents recognize change is underway, but many would like the EUP to remain similar to the region they know now.

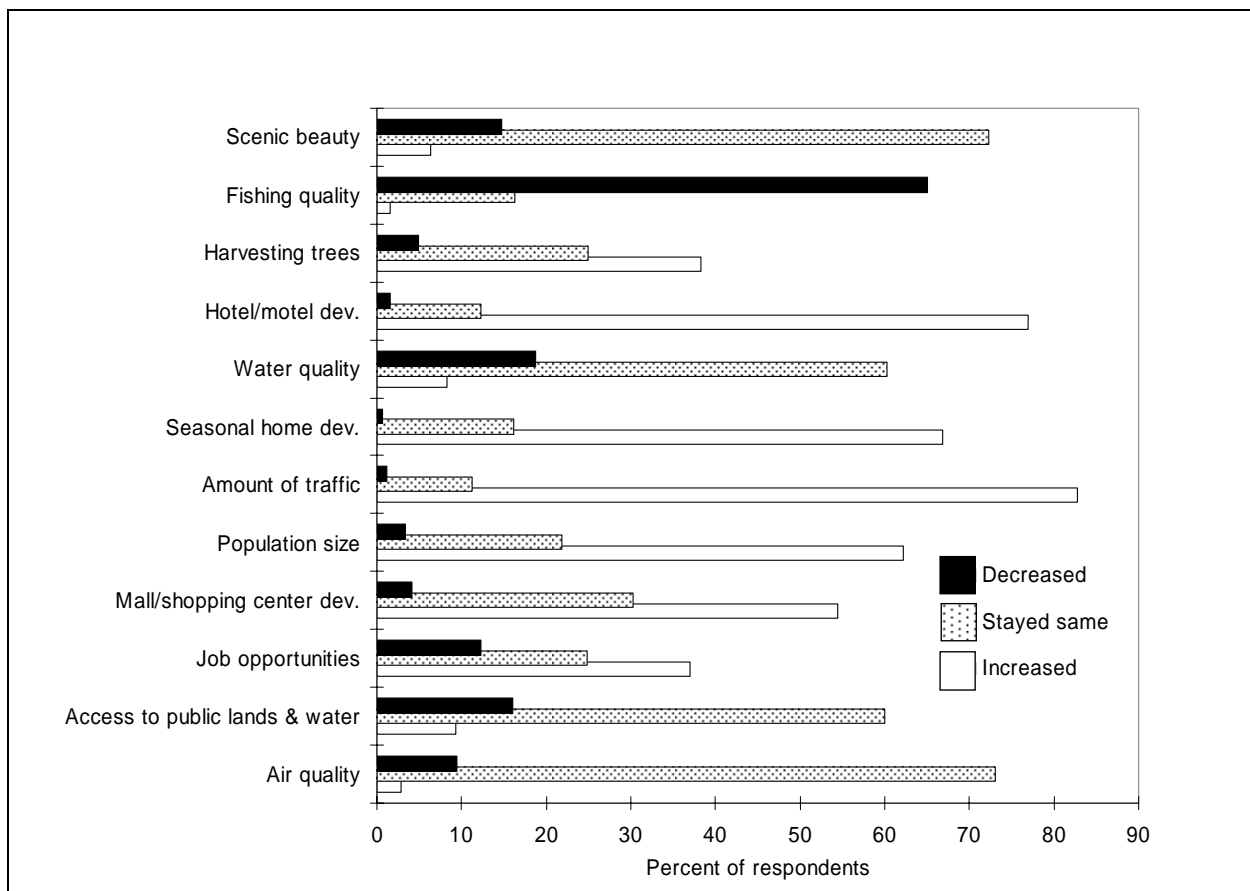


Figure 3.1. Percent of respondents who feel each characteristic of the EUP has changed over the past five years (Source: Peterson 1999).

Given the perceived changes in the EUP, residents were asked about their support for various policies for addressing future development (Figure 3.2). Setting aside natural areas, tourism, and more outdoor recreation opportunities garnered the most support with over 60% in each category. Improving and attracting various industries had widespread support, but mining, seasonal homes, casino gaming, and prisons had lower levels of support. Hence, there is a diverse set of development options that are perceived as supporting the EUP culture. Many residents feel they have little control over the future growth in the region and the policies that will affect it. WUP residents (Houghton-Ironwood-Iron River) voiced similar concerns for the need to develop economically while maintaining the quality of life (Carr and Halvorsen 2001).

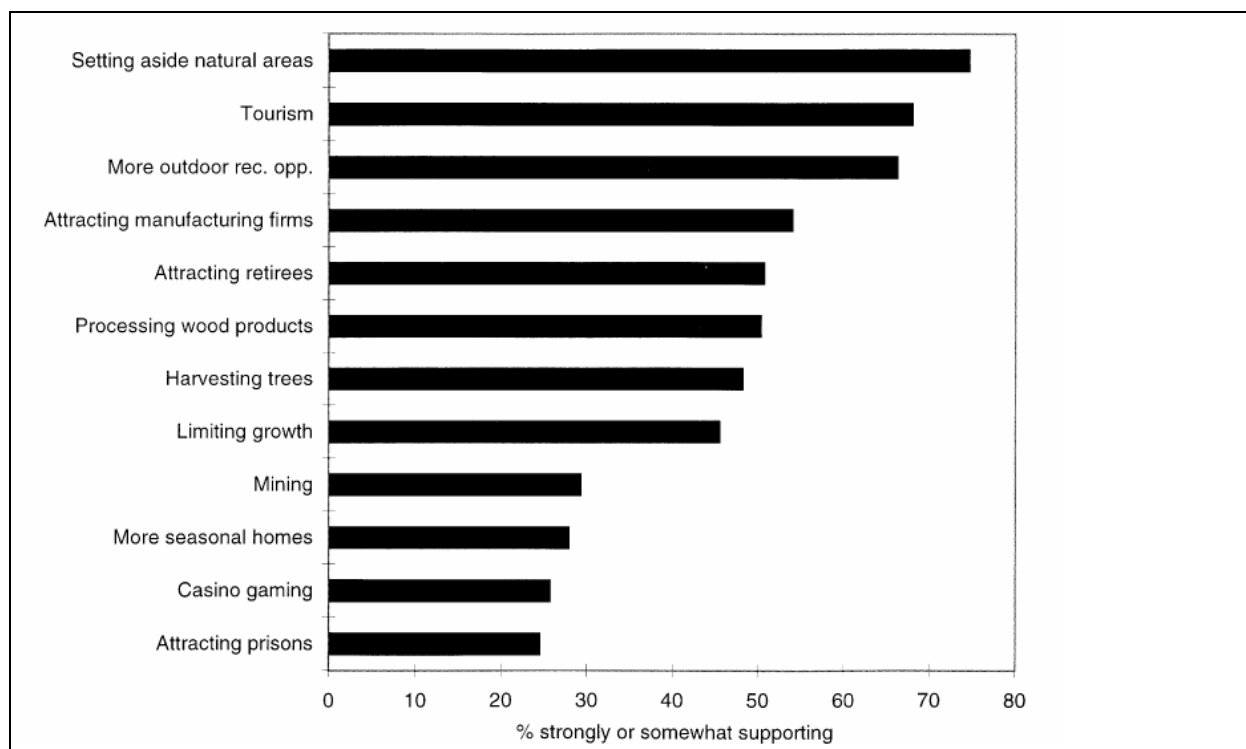


Figure 3.2. Percent of respondents who support given strategies for the future of the EUP (Source: Peterson 1999).

Community capacity and well being

The ability of communities to cope with changes in resource availability related to state forest management varies within and among communities (Leefers et al. 2003). Physical infrastructure, human capital and civic responsiveness were identified as key characteristics related to community capacity for adapting to changes in timber availability in the Pacific Northwest (USDA 1993). Human capital has many dimensions, including education, knowledge, skills, health, and values. Statistics on the civilian workforce reflect some aspects of human capital. Civic responsiveness includes leadership and institutional infrastructure including community assistance agencies and charitable organizations. These categories are similar to those of Flora and Flora (1993) who demonstrated that these factors are important components of community capacity to adapt to change. Additional measures of community well-being identified particularly in studies of forest-dependent communities include: percent of families below the poverty line, percent of families on welfare, average educational achievement, infant mortality, per capita income, incidence of social pathologies, and racial and ethnic diversity (Fortmann et al. 1989, Kusel and Fortmann 1991, McDonough et al. 1999, McDonough et al. 2002). The existence of land use policies including zoning ordinances and master plans provide an institutional metric for capacity to address change.

Following Leefers, Potter-Witter and McDonough (2003), seven measures for assessing community capacity and well being for the WUP, EUP and NLP counties are presented (Table 3.3):

- Unemployment: Percentage unemployed in the civilian labor force (US Census 2000)
- Poverty: Percentage of people below the poverty line (US Census 2000)
- Dependency: Proportion of people under 16 and over 65 to the total population (US Census 2000)
- School enrollment: Percent of population 16-19 years old not in school and not a high school graduate (US Census 2000)

- Diversity: Percent minorities (US Census 2000)
- Civic infrastructure: Public charities per thousand people. The Internal Revenue Service (IRS) defines public charities as organizations that engage in inherently public activity. These include a variety of charitable, nongovernmental and/or public service organizations. The IRS maintains an official list of these organizations (National Center for Charitable Statistics, 2000 data)
- Land use policies: The Michigan Society of Planning Officials (MSPO) maintains records on the institutional structure for land use decision making in Michigan (1995); key features include the existence of county zoning ordinances, master plans and land use studies, local planning and zoning ordinances and the number of structural features in each county. The Institute for Public Policy at Michigan State University recently updated these data (2003). Counties with comprehensive or master plans and zoning ordinances are tallied; each occurrence counts as “1”.

Of the 45 northern Michigan counties, only Leelanau and Grand Traverse counties had unemployment rates below the state average in 2000 (Table 3.3). Thirty-six of 45 counties (80%) in northern Michigan had higher rates of poverty than the state average. Only six counties had a smaller percentage of dependent residents than the state average. Seventeen of 45 counties have a higher percentage of 16-19 year olds not in school. Baraga, Chippewa and Mackinac counties have a higher level of ethnic diversity than the state as a whole. The WUP, with lower county populations, has more charitable organizations per 1000 residents than most counties in northern Michigan. Several counties in the northern part of the Lower Peninsula also have high levels of charitable organizations. Approximately 1/3 of the counties in northern Michigan have both a master plan and a zoning ordinance at the county level. Twenty-seven percent have no county-wide planning policies in place. Thus, in comparison to statewide averages, northern Michigan is characterized by relatively high unemployment, high rates of poverty, high percentages of dependent residents, and low ethnic diversity. But, the counties have higher percentages of students enrolled in school than the state as a whole.

Table 3.3. Community capacity and well being measures for ecoregion counties, 2000.

Counties by Ecoregion	Unemployment (%)	Poverty (%)	Dependency (%)	School enrollment	Diversity (%)	Civic Infrastructure	Land Use Policies
Western Upper Peninsula							
Baraga	6.4	11.1	39.2	8.5	21.4	1.83	0
Delta	5.2	9.8	40.8	3.7	4.2	2.93	2
Dickinson	4.1	8.6	43.2	4.6	2.0	2.62	0
Gogebic	6.2	14.2	43.1	7.8	5.8	3.40	0
Houghton	4.8	13.8	37.3	3.9	4.5	3.50	0
Iron	5.6	12.4	45.8	3.3	3.7	4.34	0
Keweenaw	6.1	10.4	42.8	5.3	5.0	3.48	2
Marquette	4.3	9.7	34.9	3.4	4.9	3.34	1
Menominee	4.1	10.0	41.3	4.9	3.8	1.54	0
Ontonagon	6.3	12.1	41.8	7.5	2.8	3.33	1
Eastern Upper Peninsula							
Alger	5.3	11.4	37.7	5.7	12.2	2.94	0
Chippewa	6.3	13.8	34.0	8.2	24.1	2.54	0
Luce	6.0	16.5	36.8	18.3	17.2	2.28	2
Mackinac	7.5	10.5	40.4	11.5	19.9	3.35	0
Schoolcraft	8.0	12.8	41.3	10.4	11.3	2.58	2
Northern Lower Peninsula							

Counties by Ecoregion	Unemployment (%)	Poverty (%)	Dependency (%)	School enrollment	Diversity (%)	Civic Infrastructure	Land Use Policies
Alcona	6.7	12.4	43.5	10.5	2.0	1.37	1
Alpena	5.5	11.3	40.8	5.7	1.8	2.84	1
Antrim	4.5	8.8	41.8	7.7	3.0	2.42	1
Arenac	5.7	14.2	39.9	10.4	4.6	1.22	1
Benzie	4.5	8.4	40.9	6.6	3.6	3.00	2
Charlevoix	4.4	8.2	40.8	6.7	3.7	3.76	1
Cheboygan	8.0	11.2	41.6	7.5	5.2	2.19	2
Clare	5.3	14.9	41.7	9.7	2.6	1.47	0
Crawford	4.6	13.3	41.1	6.6	3.6	2.17	2
Emmet	5.4	7.5	39.6	7.2	5.7	4.07	2
Gladwin	5.2	12.6	41.6	12.2	2.4	1.19	2
Grand Traverse	3.4	6.7	38.5	8.1	3.5	3.75	0
Iosco	6.3	12.5	44.0	11.3	3.1	2.23	0
Kalkaska	4.6	11.0	39.3	13.4	2.5	1.63	2
Lake	5.6	19.0	41.6	25.1	15.3	2.12	2
Leelanau	3.0	6.8	41.8	2.8	6.5	2.75	1
Manistee	5.3	11.2	40.7	9.6	5.8	2.81	1
Mason	4.8	10.9	41.0	10.1	4.2	2.05	2
Mecosta	4.2	14.0	35.7	5.1	7.3	2.10	2
Missaukee	4.4	11.3	41.9	10.0	2.5	2.14	1
Montmorency	7.9	12.9	44.2	7.3	1.6	2.33	1
Newaygo	4.6	10.9	41.9	10.2	5.2	1.78	1
Oceana	5.8	13.7	42.2	12.7	9.6	2.01	1
Ogemaw	5.3	14.4	42.3	7.5	2.5	1.80	1
Osceola	4.5	12.7	41.3	8.6	2.5	2.20	1
Oscoda	6.0	15.3	43.5	16.1	2.2	1.59	1
Otsego	4.1	8.4	40.5	4.3	2.5	2.92	2
Presque Isle	8.2	10.2	43.3	6.5	1.9	2.57	2
Roscommon	5.3	13.8	43.8	8.2	2.0	1.81	1
Wexford	5.3	11.0	40.8	11.2	2.7	2.46	2
Michigan							
Michigan	3.7	9.7	38.4	8.7	19.8	2.24	NA

Each county has a unique set of characteristics associated with community capacity and well being. An examination of three counties, one from each ecoregion, illustrates the array of characteristics. Iron County in the WUP has relatively high unemployment levels, high rates of poverty, high percentages of dependent residents, low ethnic diversity and no county-wide land-use policies. These attributes clearly pose challenges for county residents and institutions. However, it has a high number of charitable organizations per 1000 residents; this is a strength for the area because a more extensive network of community organizations engage in many public activities (Leefer et al. 2003). Chippewa County in the EUP has similar characteristics, but a very diverse population, and diversity can be a source of new ideas for addressing community issues. Finally, Leelanau County in the NLP had the lowest unemployment rate in northern Michigan, a low level of poverty, and some county-wide planning. The latter highlights some local desire to manage natural resources for the future. Overall,

their civic infrastructure is above average compared to others in the state; this is due mostly to the high levels of civic infrastructure in the WUP and the EUP. Hence, these data must be viewed relative to others and in a local context in order to get an accurate picture of the well being and capacity of individual counties.

Institutional and other relationships

Relationships that the MiDNR has with other organizations and people in communities near state forests are important for communicating agency and public concerns regarding forest management, creating public support for the forest management, and extending resources available for forest management activities. Citizens are involved in many forest-related activities to help insure that forests are meeting community needs. Moreover, public involvement provides a sense of ownership of state forests and creates an interest in forest-based activities. This involvement includes relationships with Tribes and other government units, public participation, partnerships with other organizations, the use of volunteers and off-forest education activities. In addition, institutional policies influence management of state forests. These policies exist at the federal, state and local level.

Tribal governments

The U.S. and Michigan governments have unique legal and political relationships with Indian tribes. Tribes are independent sovereign nations, and there are 12 federally recognized Tribes in Michigan (Figure 3.3). The U.S. government has a trust responsibility for protecting the rights of Federally Recognized Indian Tribes. Trust responsibilities are “those duties that relate to the reserved rights and privileges of Federally Recognized Indian Tribes as found in treaties, executive orders, laws and court decisions that apply to the national forests and grasslands” (USDA-Forest Service 1997).

State forests collaborate with Tribes in the management of state forest lands (Forest Certification Work Instruction 9.1, 2006). In part, the MiDNR identifies and protects “sites of special cultural, ecological, economic, or religious significance to indigenous peoples on State Forest Lands.” Further, there is a MiDNR statewide coordinator for tribal issues. Tribal contacts and involvement in on-the-ground management activities include identification of tribal geographic areas of interest and invitations to MiDNR Forest Management Unit (FMU) open houses and compartment reviews, and to statewide and ecoregional public planning events. In addition MiDNR coordinates activities, when appropriate, with Tribal Historic Preservation Officers (THPO) and the State Historical Preservation Office (SHPO) regarding activities associated with tribal archaeological sites, tribal cultural property, and tribal sites of historic significance. Finally, an annual meeting between the MiDNR and the 12 Federally Recognized Indian Tribes is held to discuss topics of mutual interest.

Many treaties define the relationships between the Tribes, the U.S. and Michigan. For example, Reinhardt (2004) identified 17 treaties signed between the Anishinaabe Three Fires Confederacy tribes and the United States of America that contain educational provisions. Treaty cessions in which Tribes ceded their lands occurred over a five-decade period starting in the 1790s (Figure 3.4). Some of these treaties (e.g., 1836 and 1842) also cover tribal hunting, fishing and gathering rights in Michigan forests.

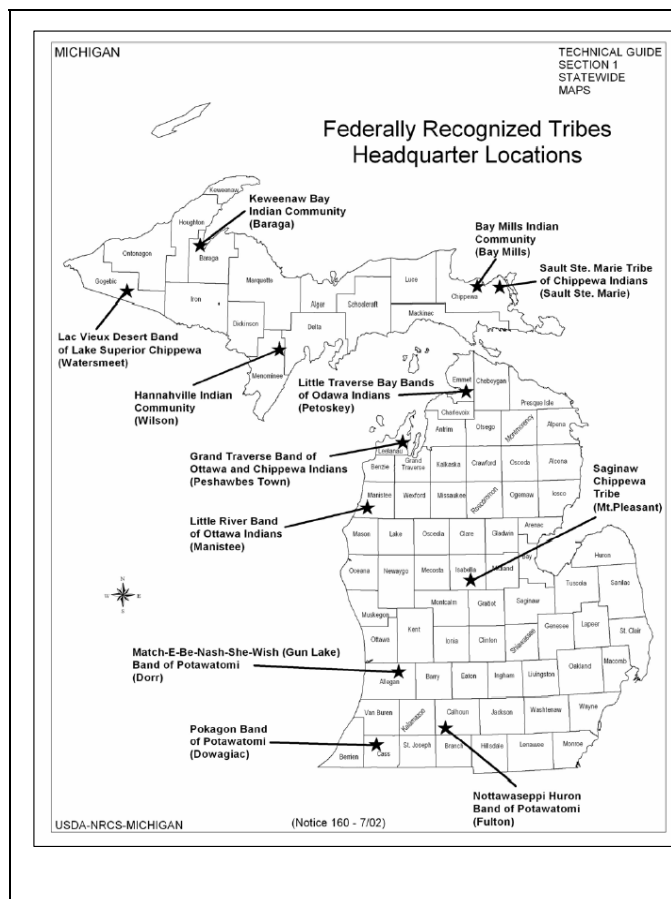
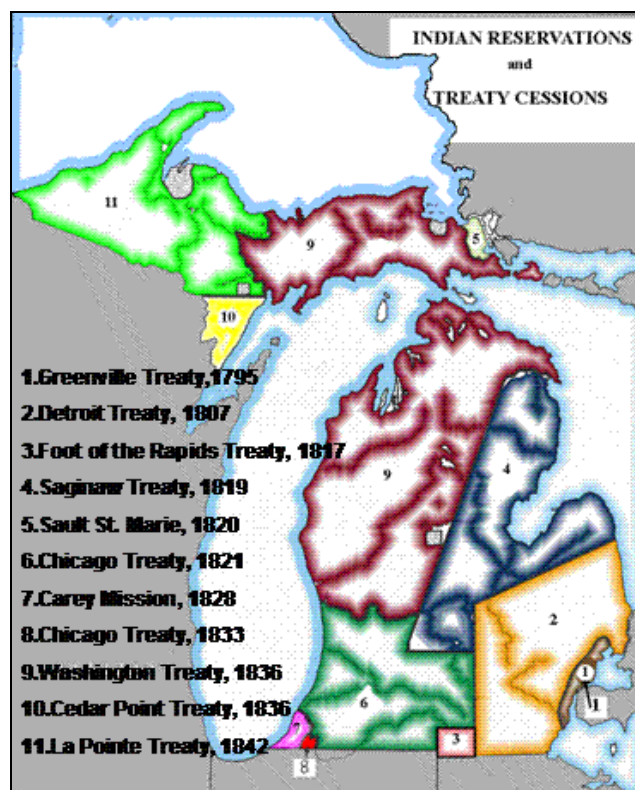


Figure 3.3. Federally recognized Tribes in Michigan.



Source: Clarke Historical Library, Central Michigan University.

Figure 3.4. Treaty cessions in Michigan, 1795-1842.

Public participation/partnerships/volunteers

Public participation is helpful in state forest decision making and in developing approaches to natural resource management. Public participation occurs at three primary administrative levels: at the State or Division level, at the Ecoregional or District Level, and at the Forest Management Unit Level (Forest Certification Work Instruction 1.5, 2005). In addition, there is substantial public participation in a wide variety of MiDNR programmatic and project work. At all levels, mailings are used to communicate information and announcements to various publics. And personal contacts with interested publics occur at all levels.

At the State Level, a portion of each Natural Resource Commission (NRC) public meeting has time for public comments. Other administrative bodies associated with the NRC also provide for public input. MiDNR employees, when appropriate, can attend meetings of various interest groups. A relatively new addition for public participation is the DNR Forest Management Advisory Committee. It is a broad, balanced group with many interests aimed at providing advice to the MiDNR Director in terms of policy and practices. Other examples of statewide advisory boards include: Snowmobile Advisory Committee, ORV Advisory Board, Recreational Trails Program Advisory Council, Citizens Waterfowl Advisory Council, Hunter Recruitment and Retention Work Group, and Michigan State Parks Citizens' Committee. Another statewide board is the Michigan Forest Finance Authority which has responsibility for managing the financing of forest management operations, implementing a system of forest management, issuing bonds or notes, and contracting for timber cutting rights.

At the Ecoregional or District Level, social values and impacts will be considered as part of special projects that cross FMU boundaries. MiDNR and external expertise will be used on these projects when appropriate. Public involvement will also be used in developing ecoregional plans. Public meetings and written comments will be

used in this process. Finally, public input and review will be used in developing and reviewing criteria and indicators for the ecoregional planning efforts.

At the Forest Management Unit Level, there are three formal opportunities for public input: during the annual FMU open house, via the FMU web page or through written or oral comments to FMU staff, or during compartment reviews. In addition, there are other opportunities for input. For example, the Pigeon River Country Advisory Council provides advice to the MiDNR Director regarding management and policies for the Pigeon River Country Forest Management Unit.

Partnerships are commonplace in contemporary natural resource management. Partnerships involve two or more groups which have shared goals. By combining efforts on shared activities, the partnership can have better access to needed and timely capital (financial, human, social) and act with greater efficiency (Leefers et al. 2003).

Partnerships with other organizations and agencies help state forests get more work done and integrate the state forests more directly in the communities in which they are located. Michigan's state forests have extensive relationships with diverse partners across the state (Table 3.4). The representative list includes diverse groups such as church organizations, federal agencies, local law enforcement agencies, and sportsman clubs. In total, there are more than 1,100 volunteer and partnership organizations. Though data are only partial, volunteers contributed close to 3,500 hours over nine months in 2004 (Table 3.5). The major programs were Urban & Community Forestry (planting and caring for trees, exotic plant removal), Adopt-a-Forest, River and Trails programs (trash abatement), Project Learning Tree (educational), Campground Hosts, and Lime Island (general maintenance). The volunteer hours capture only part of their contribution—preparation and travel are not counted, and many activities are not recorded.

Statewide, thousands of acres of state forests have been adopted by local groups which assist primarily in cleanup activities (Table 3.6). Illegal dumping of trash is a major problem on public lands throughout northern Michigan (Table 3.7). The majority of dump sites are on MiDNR lands, the largest public landowner. And the majority of the sites are associated with the NLP, an area with greater population densities than the UP. Volunteers provide tremendous assistance in cleaning these sites (Table 3.8).

Public education and outreach are important MiDNR activities. Project Learning Tree is one example of educational programs aimed at increasing knowledge about forested systems (Table 3.9). The MiDNR conducts public educational outreach through a variety of methods including printed materials, web sites, workshops, interpretive signing, and other means.

Table 3.4. Groups of organizations involved in Michigan DNR volunteer and partnership activities (self reported).

Type of Organization
Banks and Credit Unions
Business Organizations (e.g. Chambers of Commerce)
Church Organizations and Camps
Civic Organizations (e.g. Kiwanis)
Conservation Districts
Private Conservation Groups (Friends of...)
Federal Agencies (National Forests, National Parks, Rural Development, Coast Guard)
Individual Families
Industrial Firms
Landowner and Homeowner Associations
Local Community Governments
Local Law Enforcement Agencies
Military Units
National Interest Groups
Educational Nature Centers
Other State Government Units
Outdoor Recreation Clubs

Outdoor Recreation Outfitters and Guides
 Public and Private Schools
 Retail Establishments
 Sportsman Clubs (Hunting, Fishing, Wildlife)
 Tribal Groups and Interests
 Universities
 Youth Programs (4-H, Boy and Girl Scouting Organizations)

Table 3.5. Summary of volunteer activity by program area and hours, Jan.1 –Oct. 8, 2004 (self reported).

Program	# of Volunteers	Total Hours Reported
Urban & Community Forestry	1,430	5,177
Adopt-a-programs	1,915	10,459
Project Learning Tree	23	218
Campground Host	27	14,080
Lime Island	15	123
Total:	3,410	30,057

Table 3.6. Number of State Forest acres "Adopted" by interested groups (self reported).

Ecoregion/ County	Total Acres
Western Upper Peninsula	
Marquette	720
WUP Total	720
Eastern Upper Peninsula	
Alger	1,280
Mackinac	1,280
EUP Total	2,560
Northern Lower Peninsula	
Alcona	3,520
Alpena	440
Charlevoix	2,425
Cheboygan	5,600
Clare	762
Crawford	5,240
Emmet	2,512
Gladwin	2,360
Iosco	16,880
Kalkaska	6,180
Lake	1,280
Manistee	520
Mason	320
Missaukee	920
Montmorency	1,600

Ecoregion/ County	Total Acres
Newaygo	120
Ogemaw	3,120
Oscoda	22,400
Otsego	2,720
Presque Isle	1,560
Roscommon	18,850
Wexford	200
NLP Total	99,529
Michigan	213,258

Table 3.7. Number of forest dump sites tracked by Michigan DNR.

Ecoregion	DNR	USFS	Other	Total Sites	DNR Acres	DNR Sites per 1,000 Acres
Western Upper Peninsula	93	70	1	164	960,895	0.097
Eastern Upper Peninsula	47	24	0	71	1,116,699	0.042
Northern Lower Peninsula	539	82	3	624	2,073,890	0.260
Michigan	894	177	4	1075	4,581,428	0.195

Source: Ada Takacs, Michigan DNR

Note: Includes sites on all lands managed by the Other = private, county, township, or city/town lands.

Table 3.8. Volunteer Forest Dumpsite Cleanup Activities, 1991-2005.

Year	Projects	Participants	Acres
1991	8	282	41,622
1992	50	495	51,778
1993	43	380	68,650
1994	41	381	53,041
1995	84	889	80,095
1996	59	540	116,840
1997	59	584	89,050
1998	106	2,629	165,813
1999	96	1,071	72,365
2000	117	1,144	93,485
2001	117	1,277	139,200
2002	105	923	82,452
2003	86	878	65,947
2004	106	1,915	69,612
2005	100	1,818	59,840

Note: Includes sites on both state and federal lands.

Table 3.9. Project Learning Tree (PLT) Workshops conducted by DNR staff, 2003 to 2005.

Year	Workshops	Participants
2003	9	42
2004	17	181
2005	17	251

Data Source: Ada Takacs, Michigan DNR

Land Use, Planning, and Policy

State forests exist in a political and social environment of national, state and local land use policies. Some of these policies do not directly influence state forest management, but they drive management decisions on adjacent and nearby lands. Land use policies, for purposes of this report, are legislative and other policies that influence land allocation decisions and management activities. Federal statutes directly affecting national forest management and other federal statutes that affect national forest management are presented first (Table 3.10), followed by Michigan statutes that impact state and local land use, and finally local land-use policies by ecoregion are presented.

Major federal statutes

Policies related to national forests are emphasized in Table 3.10; they are managed by the USDA Forest Service. National forests have the most significant land holdings of any federal agency. However, the USDI National Park Service and USDI Fish and Wildlife Service also have lands in northern Michigan. They have their own organic legislation and management policies that flow from legislation. The “other federal statutes” apply to all federal agencies.

Table 3.10. Major federal statutes affecting national forest management.

Major USDA Forest Service statutes
Cooperative Forestry Assistance Act of 1978
Forest and Rangeland Renewable Resources Planning Act of 1974
Forest and Rangeland Renewable Resources Research Act of 1978
Multiple-Use Sustained-Yield Act of 1960
National Forest Management Act of 1976
Organic Administration Act of 1897
Weeks Law of 1911
Other federal statutes
American Indian Religious Freedom Act
Americans with Disabilities Act
Antiquities Act
Archaeological Resources Protection Act
Civil Rights Act
Clean Water Act
Endangered Species Act
Land and Water Conservation Fund Act
National Environmental Policy Act

National Historic Preservation Act
Native American Grave Protection and Repatriation Act
Rehabilitation Act
Religious Freedom Restoration Act
Resource Conservation and Recovery Act
Wild and Scenic Rivers Act
Wilderness Act

Source: Vincent et al. 2001

Major state statutes

Historically, Michigan had numerous statutes related to natural resource management. In 1994, these disparate statutes were combined into the Natural Resources and Environmental Protection Act (P.A. 451) (Table 3.11). Most chapters and parts associated with state forest and other resource management are in Article III, Natural Resource Management. Natural Resource Commission and other MiDNR policies implement the legislative intent of P.A. 451.

Table 3.11. State statutes affecting state forest planning.

Article I - General Provisions (324.101...324.2521)	
Part 1	Short Title And Savings Clauses
Part 3	Definitions
Part 5	Department Of Natural Resources
Part 7	Forest And Mineral Resource Development
Part 9	Joint Environmental Management Authorities
Part 11	General Appellate Rights And Public Access To Government
Part 13	Permits
Part 15	Enforcement
Part 16	Enforcement Of Laws For Protection Of Wild Birds, Wild Animals, And Fish
Part 17	Michigan Environmental Protection Act
Part 18	Uniform Transboundary Pollution Reciprocal Access
Part 19	Natural Resources Trust Fund
Part 20	Michigan Conservation And Recreation Legacy Fund
Part 21	General Real Estate Powers
Part 23	Agriculture And The Environment
Part 25	Environmental Education
Article II - Pollution Control (324.3101...324.21552)	
Chapter 1	Point Source Pollution Control
Chapter 2	Nonpoint Source Pollution Control
Chapter 3	Waste Management
Chapter 4	Pollution Prevention
Chapter 5	Recycling And Related Subjects
Chapter 6	Environmental Funding
Chapter 7	Remediation
Chapter 8	Underground Storage Tanks

Article III - Natural Resources Management (324.30101...324.83109)	
Chapter 1	Habitat Protection
Chapter 2	Management Of Renewable Resources
Chapter 3	Management Of Nonrenewable Resources
Chapter 4	Recreation
Article VII - Codification Of Pa 451 (324.90101...324.90106)	
Part 901	

Major local planning and zoning statutes

Local planning and zoning combine to direct local land use. Planning authorities focus on developing comprehensive plans at various governmental levels (region, county, township, and municipality), whereas zoning authorities implement the planning direction (Table 3.12). Various levels of intergovernmental or interagency coordination are required under these statutes (Leefers et al. 2003). A number of other statutes affect state forest lands. For example, the Subdivision Control Act of 1967 (P.A. 288) influences how private lands are subdivided. This, in turn, may affect habitat conditions near state forests.

Table 3.12. Principal local planning and zoning statutes affecting state forest planning.

Principal planning authorities	
P.A. 168 of 1959	Township Planning Act
P.A. 285 of 1931	Municipal Planning Act
P.A. 282 of 1945	County Planning Act
P.A. 281 of 1945	Regional Planning Act
	Joint Planning Act
Principal zoning authorities	
P.A. 184 of 1943	Township Zoning Act
P.A. 207 of 1921	City and Village Zoning Act
P.A. 183 of 1943	County Zoning Act

Table 3.13. Master plans and zoning ordinances by county and ecoregion.

Counties by Ecoregion	Master Plan	Zoning Ordinance
Western Upper Peninsula		
Baraga		
Delta	Yes	Yes
Dickinson		
Gogebic		
Houghton		
Iron		
Keweenaw	Yes	Yes
Marquette	Yes	
Menominee		
Ontonagon	Yes	

Counties by Ecoregion	Master Plan	Zoning Ordinance
Eastern Upper Peninsula		
Alger		
Chippewa		
Luce	Yes	Yes
Mackinac		
Schoolcraft	Yes	Yes
Northern Lower Peninsula		
Alcona	Yes	
Alpena	Yes	
Antrim	Yes	
Arenac	Yes	
Benzie	Yes	Yes
Charlevoix	Yes	
Cheboygan	Yes	Yes
Clare		
Crawford	Yes	Yes
Emmet	Yes	Yes
Gladwin	Yes	Yes
Grand Traverse		
Iosco		
Kalkaska	Yes	Yes
Lake	Yes	Yes
Leelenau	Yes	
Manistee	Yes	
Mason	Yes	Yes
Mecosta	Yes	Yes
Missaukee	Yes	
Montmorency	Yes	
Newaygo	Yes	
Oceana	Yes	
Ogemaw		Yes
Osceola	Yes	
Oscoda	Yes	
Otsego	Yes	Yes
Presque Isle	Yes	Yes
Roscommon	Yes	
Wexford	Yes	Yes

Source: Institute for Public Policy and Social Research, 2004

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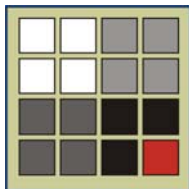
Social and Economic Assessment for Michigan's State Forests

APPENDIX

**Prepared for: Michigan Department of Natural Resources
Forest, Mineral, and Fire Management Division**

Lansing, Michigan

September 5, 2006



**Prepared by:
Tessa Systems, LLC
East Lansing, MI**

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Chapter 3. MI DNR Relationships with Communities

Table A3.1. Communities of interest by eco-region (self reported)

State-wide	WUP	EUP	NLP	Organization
				Int'l Government
X	X	X	X	International Joint Commission - Great Lakes Regional Office
				Federal Government
			X	Camp Grayling
			X	Farm Service Agency
	X	X		Hiawatha National Forest
			X	Huron Manistee National Forest
X	X	X	X	Natural Resource Conservation Service
			X	Natural Resources Conservation Service
	X			Ottawa National Forest
X	X	X	X	US Fish and Wildlife Service
X	X	X	X	USDA Forest Service
			X	USDI National Park Service
				Multi-State Government
X	X	X	X	Great Lakes Fishery Commission
				State Government
X	X	X	X	Governor's Office
X	X	X	X	Michigan Department of Agriculture
X	X	X	X	Michigan Department of Environmental Quality
X	X	X	X	Michigan Department of Natural Resources Fisheries Division
			X	Michigan Department of Transportation
X	X	X	X	Michigan Dept. of Agriculture
X	X	X	X	Michigan Economic Development Corporation
X	X	X	X	Michigan Sea Grant
X	X	X	X	Michigan Water Resources Commission
			X	State Historic Preservation Office
			X	State senators and representatives
				Local Government
			X	Alcona County Road Commission
			X	Alpena County Road Commission
			X	Antrim County Road Commission
			X	Arenac County Road Commission
			X	Bay County Road Commission
			X	Benzie County Road Commission
			X	Charlevoix County Road Commission
			X	Cheboygan County Road Commission
		X		Chippewa E Mackinac Cons District
			X	Clare County Road Commission
X	X	X	X	County Conservation Districts
X	X	X	X	County Road Commissions

State-wide	WUP	EUP	NLP	Organization
			X	Crawford County Road Commission
			X	Emmet County Road Commission
			X	Gladwin Co. Rd. Comm.
			X	Gladwin County Road Commission
	X			Gogebic County Forest
			X	Grand Traverse County Road Commission
			X	Iosco County Road Commission
			X	Isabella County Road Commission
			X	Kalkaska County Road Commission
			X	Lake County Road Commission
			X	Leelanau County Road Commission
		X		Luce County Road Commission
			X	Manistee County Road Commission
		X		Marquette Conservation District
			X	Mason County Road Commission
			X	Mecosta County Road Commission
			X	Midland County Road Commission
			X	Missaukee County Road Commission
			X	Montmorency County Conservation District
			X	Montmorency County Road Commission
			X	Newaygo County Road Commission
		X		Newberry Fire Dept
			X	Oceana County Road Commission
			X	Ogemaw County Road Commission
			X	Osceola County Road Commission
			X	Oscoda County Road Commission
			X	Otsego Co Road Commission.
			X	Otsego County Road Commission
			X	Presque Isle County Road Commission
			X	Roscommon County Road Commission
		X		Tri-County Fire Department
			X	Tri-Township Fire Dept
			X	Waverly Township (Cheboygan County)
			X	Wexford County Road Commission
				Development/planning
			X	Alpena Area Chamber of Commerce
			X	Boyne Area Chamber of Commerce
			X	Cadillac Area Chamber of Commerce
			X	Cadillac Visitor's Bureau
			X	Cadillac Winter Promo.
			X	Charlevoix Area Chamber of Commerce
			X	Cheboygan Area Chamber of Commerce
			X	Clare Co. Planning Committee
			X	County Road Association of Michigan

State-wide	WUP	EUP	NLP	Organization
			X	East Central Michigan Planning & Development Comm
			X	Gaylord/Otsego County Chamber of Commerce
			X	Grayling Regional Chamber of Commerce
			X	Higgins Lake - Roscommon Chamber of Commerce
			X	Houghton Lake Chamber of Commerce
			X	Huron Pines RC&D
X	X	X	X	Local Chambers of Commerce
			X	Manistee Area Chamber of Commerce
			X	Mecosta County Area Chamber of Commerce
			X	Michigan Association of Planning
			X	Michigan Chamber of Commerce
			X	Michigan Municipal League
			X	Michigan Sheriffs Association
			X	Michigan Sunrise Side Travel Association
			X	Michigan Township Association
			X	NE Michigan Council of Governments
			X	NW Michigan Council of Governments
			X	Petoskey Regional Chamber of Commerce
			X	Rural Development Council of Michigan
			X	Traverse City Chamber of Commerce
			X	West Michigan Shoreline Regional Development Commission
			X	West Michigan Tourist Association
				Tribal
X	X	X	X	Bay Mills Indian Community
X	X	X	X	Burt Lake Band of Ottawa and Chippewa Indians
X	X	X	X	Grand River Band of Ottawa Indians
X	X	X	X	Grand Traverse Band of Ottawa and Chippewa Indians
X	X	X	X	Great Lakes Indian Fish and Wildlife Commission (GLIFWC) – Odanah, WI
X	X	X	X	Hannahville Indian Community
X	X	X	X	Huron Potawatomi Nation
X	X	X	X	Keweenaw Bay Indian Community
X	X	X	X	Lac Vieux Desert Band of Lake Superior Chippewa Indians
X	X	X	X	Little River Band of Ottawa Indians
X	X	X	X	Little Traverse Bay Bands of Odawa Indians
X	X	X	X	Match-e-be-nash-she-wish Band of Pottawatomis Indians
X	X	X	X	Michigan Agency Bureau of Indian Affairs
X	X	X	X	Pokagon Band of Potawatomi Indians
X	X	X	X	Saginaw Chippewa Indian Tribe
X	X	X	X	Sault Ste. Marie Tribe of Chippewa Indians
X	X	X	X	Swan Creek Black River Confederated Ojibwa Tribes
				Universities
			X	Alpena Community College
			X	Baker College

State-wide	WUP	EUP	NLP	Organization
			X	Central Michigan University
			X	Davenport University
			X	Grand Valley State University
			X	Kirtland Community College
		X		Lake Superior State University
X	X	X	X	Michigan State University
X	X	X	X	Michigan Technological University
			X	Mid-Michigan Community College
			X	North Central Michigan College
X	X	X	X	University of Michigan
				Research, Development, and Extension
X	X	X	X	Annis Water Resources Institute - Grand Valley State University
X	X	X	X	Michigan Land Use Institute
X	X	X	X	Michigan State University Extension
				Forestry
			X	Consulting foresters
X	X	X	X	Forest Conservation Council
X	X	X	X	Forest products industry
X	X	X	X	Forestry consultants
X	X	X	X	Great Lakes Forest Resource Alliance
			X	Lake States Lumber Association
X	X	X	X	Logging Contractors
	X			Marquette County Forestry Commission
		X		MI Assn of Timbermen
		X		MI Forest Stewardship Advisory Comm
X	X	X	X	Michigan Association of Consulting Foresters
X	X	X	X	Michigan Association of Timbermen
			X	Michigan Christmas Tree Association
X	X	X	X	Michigan Forest Association
X	X	X	X	Michigan Forest Products Council
X	X	X	X	Michigan Forest Resource Alliance
			X	Michigan Maple Syrup Association
			X	Michigan Professional Loggers Council
X	X	X	X	Michigan Society of American Foresters
X	X	X	X	Michigan Tree Farm System
			X	Pigeon River Community Advisory Council
			X	Pigeon River County Association
X	X	X	X	Society of American Foresters
	X			Timber Investment Management Organizations (TIMOs)
X	X	X	X	Timber Producers Association of Michigan and Wisconsin
X	X	X	X	Timberland Resource Conservation and Development
				Energy
			X	Energy companies
X	X	X	X	Michigan Oil & Gas Association

State-wide	WUP	EUP	NLP	Organization
				Recreation
			X	Alpena Snowmobile Club
X	X	X	X	Boy Scout Organizations
			X	BSA Scenic Trails Council
			X	Cadillac Motorcycle Club
			X	Cadillac Pathway
X	X	X	X	Cycle Conservation Club
		X		Drummond Island ORV Club
X	X	X	X	Girl Scout Organizations
			X	Girl Scouts Crooked Tree Council
			X	Girl Scouts of Mitten Bay
		X		Grand Marais Snowmobile Club
			X	Grand Traverse Area Snowmobile Council
		X	X	Great Lakes 4 Wheel Drive Association
	X			Iron Range Trail Club Inc.
			X	Lansing Motorcycle Club
	X			MI ATV Association
	X			MI RV And Campers Association
			X	Mich Mt Biking Assoc
			X	Mich Trail Riders Assoc.
			X	Michigan Association of RV Campgrounds
			X	Michigan Cycle Conservation Club
			X	Michigan Longbow Association
			X	Michigan Mountain Bike Association
			X	Michigan Rails-to-Trails Conservancy
			X	Michigan Recreation Canoe Association
			X	Michigan Recreational Vehicles Riders Association
			X	Michigan Rifle & Pistol Association (NRA)
X	X	X	X	Michigan Snowmobile Association
			X	Michigan Sport Rider
			X	Michigan Trail Riders Association
			X	Midland to Mackinaw Hiking Trail
	X		X	North Country Trail Association
			X	Norway Ridge Ski/Hiking Trail
	X			ORV Advisory Committee
			X	Over the Hill 4 Wheelers
		X		Paradise Nightriders Snowmobile Club
		X		Schoolcraft Snowmobile Assoc.
			X	So Michigan Rockcrawlers 4WD
		X		SORVA ORV Organization
		X		Tahquamenon Area Snomobile Association
			X	Trails Program Advisory Board
			X	Two Trackers 4WD Club
				Fish and Wildlife

State-wide	WUP	EUP	NLP	Organization
		X		Alger Co. Sportsmen's Alliance
			X	Alpena B.A.S.S. Club
X	X	X	X	American Fisheries Society - Michigan Chapter
			X	Anglers of the AuSable
			X	Archery Bear Hunters of Michigan
			X	Au Sable Institute
			X	Avid Bass Anglers of MI
	X			Bay De Noc Gobblers, Delta County Chapter Of N.W.T.F.
			X	Benzie Area Steelheaders
			X	Benzie Fishery Coalition
	X			CLK Sportsmen's Club
X	X	X	X	Ducks Unlimited
	X			Eastern Dickinson Co. Sportsmen Club
			X	Elk-Skegemog Association
			X	Elk-Skegemog Lake Association
X	X	X	X	Federation of Fly Fishers
			X	Gladwin Field Trial Area
	X			Great Lakes Fur Harvesters
			X	Grouse Unlimited
		X		Hiawatha Sportsman Club
	X			Iron County Bowhunting Club
			X	Isaac Walton League
X	X	X	X	Izaak Walton League - Michigan Division
			X	Lake Huron Sport Fishing Association
			X	Mackinaw Trail Fly Fishers
	X			Menominee Woods & Stream Sportsmen
			X	Mich Wild Turkey Federation
X	X	X	X	Michigan Anglers Association
			X	Michigan Bear Hunters Association
X	X	X	X	Michigan Bow Hunter's Association
			X	Michigan Bowhunters Association
X	X	X	X	Michigan Duck Hunter's Association
X	X	X	X	Michigan Fly Fishing Club
			X	Michigan Hunting Dog Federation
			X	Michigan Outdoors Habitat Brokerage
			X	Michigan Sharptail Grouse Association
X	X	X	X	Michigan Sharptailed Grouse Association
			X	Michigan Sportsmen's Congress
			X	Michigan State United Coon Hunters Association
X	X	X	X	Michigan Steelhead and Salmon Fishermen's Association
			X	Michigan Traditional Bowhunters Association
			X	Michigan Trail Fly Fishers
X	X	X	X	Michigan Trappers Association
			X	Michigan United Coonhunters Association

State-wide	WUP	EUP	NLP	Organization
X	X	X	X	Michigan Wild Turkey Hunter's Association
			X	Michigan Wild Turkey Hunters Association
	X			Mid-County Sportsman's Club
			X	Montmorency County Sportsmans Club
X	X	X	X	National Wild Turkey Federation
X	X	X	X	National Wildlife Federation
			X	NE Michigan Houndsman Club
			X	NE Michigan Hunt Clubs
	X			Normenco Sportsman's Club
			X	Northland Sportsmen's Club
			X	Northwest Michigan Hunting Dog Federation
			X	NWF-GL Natural Resource Center
	X			Ottawa Sportsman's Club
	X			Otter Lake Sportsmen's Club
X	X	X	X	Pheasants Forever
	X			Portage Lake Sportsmen, Inc.
			X	Presque Isle Sportsmen Club
			X	Quail Unlimited National Headquarters
			X	Quality Deer Management
		X		Quality Deer Mgmt. Assoc.
			X	Quality Whitetails
			X	Rocky Mountain Elk Foundation
X	X	X	X	Ruffed Grouse Society
			X	Ruffed Grouse Society/Buttles Rd Ski Trail
	X		X	Safari Club International
	X			Sagola Twp. Sportsmen's Club
		X		Sault Area Sportsmens Club
		X		Schoolcraft Co. UP Whitetails Assoc.
			X	Steelhead Anglers
X	X	X	X	Steelheaders Association
			X	Sturgeons for Tomorrow
	X			Superior Deer Management Assoc
X	X	X	X	The Wildlife Society - Michigan Chapter
			X	Thunder Bay Steelheaders
X	X	X	X	Trout Unlimited
			X	Trout Unlimited/Pine R.
	X			U.P. Bear Houndsmen Association
	X			U.P. Boss Busters, Marquette County Chapter Of N.W.T.F.
	X			U.P. Bow Hunters
	X			U.P. Long Beards, Dickinson County Chapter Of N.W.T.F.
	X			U.P. Sportsmen's Alliance
	X			U.P. Trappers Association
	X			U.P. Whitetails Assoc.
	X			U.P. Whitetails Of Marquette County

State-wide	WUP	EUP	NLP	Organization
	X			United Bear Hunters
	X			UP Sportsman Assoc
	X			UP Whitetails Of Dickinson County
	X	X		Upper Peninsula Sport Fishermen's Association
		X		Whitefish Township Fire Dept
X	X	X	X	Whitetails Unlimited
	X			Whitetails Unlimited - Ontonagon Co.
X	X	X	X	Wild Turkey Hunters Association
X	X	X	X	Wildlife Society
	X	X		Wildlife Unlimited of Delta County, Michigan, Inc.
	X			Wildlife Unlimited Of Dickinson Co.
	X			Wildlife Unlimited Of Iron County
	X		X	Woodcock Limited
				Land Management
			X	Charlevoix Conservancy
		X		Friends of the Pictured Rocks
X	X	X	X	Great Lakes Bioregional Land Conservancy
			X	HeadWaters Land Conservancy
			X	Land Conservancy of West Michigan
			X	Leelanau Conservancy
			X	Little Forks Conservancy
			X	Little Traverse Conservancy
			X	Pigeon River Country Association
			X	PTS Betsie to Sable Conservancy
			X	Saginaw Basin Land Conservancy
				Conservation
			X	American Land Conservancy
			X	Cadillac Area Land Conservancy
			X	Conservation Reserve Alliance
			X	Conservation Resource Alliance
			X	Elkland Senior Conservation Club
			X	Grand Traverse Regional Land Conservancy
			X	Grass Lake Natural Area
X	X	X	X	Michigan Association of Conservation Districts
X	X	X	X	Michigan Natural Features Inventory (MNFI)
X	X	X	X	Michigan Nature Association
X	X	X	X	Michigan Resource Stewards
X	X	X	X	Michigan United Conservation Clubs
			X	Old Mission Conservancy
			X	Points Betsie to Sable Conservancy
X	X	X	X	The Nature Conservancy of Michigan
			X	The Wildflower Association of Michigan
				Environmental
			X	Friends of Northeast Michigan Ecosystems

State-wide	WUP	EUP	NLP	Organization
X	X	X	X	Greening of Detroit
X	X	X	X	Michigan Environmental Council
			X	Northern Michigan Environmental Action Council
X	X	X	X	Northwoods Wilderness Recovery
X	X	X	X	The Sierra Club, Mackinac Chapter
	X			Upper Peninsula Environmental Coalition
X	X	X	X	West Michigan Environmental Action Council
X	X	X	X	Wilderness Society
				Water Resources
			X	Bear Creek Watershed Council
			X	Black Lake Association
			X	Boardman River Advisory Council
			X	Boardman River Project
			X	Boardman River Restoration and Protection Project
			X	Cedar River Alliance
			X	Chippewa Water Conservancy
			X	Clean Water Action
			X	Defenders of the Great Lakes
			X	Friends of the Crystal River
			X	Friends of the Jordan River Watershed
			X	Grand Traverse Bay Watershed Initiative
			X	Lake Michigan Federation
			X	Michigan Association of Drain Commissioners
X	X	X	X	Michigan Audubon Society
X	X	X	X	Michigan Wildlife Habitat Foundation
			X	N. Tittabawassee R. Task Force
			X	North American Lake Mgmt Society
			X	Pere Marquette Watershed Council
			X	Pigeon River Habitat Initiative
			X	Pine River Association
			X	Thunder Bay River Watershed Council
			X	Tip of the Mitt Watershed Council
			X	Upper Black River Watershed Rest. Committee
			X	Upper Manistee River Restoration Committee
			X	Walloon Lake Trust & Conservancy
				NGOs-Other
		X		Farm Bureau
		X		Mcmillan Township Supervisor
	X			MI Farm Bureau
			X	Michigan 4-H Foundation
			X	Michigan Association of Counties
			X	Michigan Association of Realtors
X	X	X	X	Michigan DNR Retirees Ethical Association
X	X	X	X	Michigan Farm Bureau

State-wide	WUP	EUP	NLP	Organization
X	X	X	X	Michigan Nursery and Landscape Association
			X	Pigeon River Country Advisory Council
			X	Public Sector Consultants
			X	Twin Bay Trail Riders
				Media
			X	Michigan Outdoor Writers Association
X	X	X	X	Print media
				Unknown
			X	Camp Daggert
			X	EC&S
			X	ENFIA
X	X	X	X	FSA
			X	NMC
			X	Spirit of the Woods
			X	We Love Smokey Society

Table A3.2. Number of DNR-issued citations by ecoregion and type, 1995 to 2004

Year	Total Citations	Wildlife	Fish	Land and water	Snow-mobile	Marine	ORV	Environmental	Gen. Criminal / Other
Western Upper Peninsula									
1995	1,713	403	419	156	366	131	213	4	21
1996	2,168	365	419	170	720	186	219	12	77
1997	2,099	338	425	184	634	171	257	9	81
1998	1,921	371	414	175	339	216	287	13	106
1999	1,900	309	421	169	450	203	238	13	97
2000	1,901	351	399	158	527	168	206	7	85
2001	1,697	331	337	178	362	144	250	5	90
2002	1,348	307	233	176	329	93	160	4	46
2003	1,387	308	225	115	318	106	246	5	64
2004	1,462	355	276	142	271	95	260	7	56
Eastern Upper Peninsula									
1995	1,137	240	175	121	338	110	135	4	14
1996	1,162	229	198	80	354	102	142	5	52
1997	1,268	271	208	80	416	107	118	5	63
1998	1,149	164	178	106	383	127	119	1	71
1999	1,153	157	189	66	443	103	142	7	46
2000	1,024	147	146	80	378	84	151	4	34
2001	905	166	156	101	201	86	144	1	50
2002	1,119	197	122	111	418	72	142	3	54
2003	897	152	103	51	392	47	114	3	35
2004	510	153	95	36	114	30	74	2	6
Northern Lower Peninsula									
1995	7,302	1,491	1,983	700	783	409	1,789	61	86
1996	7,845	1,293	2,112	641	1,118	597	1,725	48	311
1997	8,733	1,385	1,895	788	1,574	598	2,093	60	340
1998	9,045	1,088	2,004	951	1,146	657	2,739	58	402
1999	8,187	1,112	2,188	683	767	641	2,397	52	347
2000	7,788	1,090	2,082	813	860	413	2,172	51	307
2001	8,305	1,219	2,230	702	692	514	2,523	49	376
2002	7,974	1,342	2,130	1,010	515	541	2,053	55	328
2003	8,534	1,552	1,957	1,655	796	427	1,735	48	364
2004	7,733	1,361	1,629	1,527	1,001	394	1,466	42	313
Michigan									
1995	18,070	4,249	4,851	1,962	1,815	1,903	2,894	137	259
1996	19,115	3,714	5,075	1,762	2,607	2,146	2,885	96	830
1997	19,829	4,047	4,651	1,812	3,195	1,919	3,236	110	859
1998	19,466	3,344	4,837	2,048	2,060	2,239	3,849	105	984
1999	19,294	2,972	5,448	2,017	2,024	2,374	3,504	106	849
2000	19,309	2,930	5,588	2,155	2,432	1,902	3,352	89	861
2001	17,731	3,060	4,878	1,784	1,506	1,705	3,800	82	916

Year	Total Citations	Wildlife	Fish	Land and water	Snow-mobile	Marine	ORV	Environmental	Gen. Criminal / Other
2002	17,454	3,376	4,591	2,091	1,557	1,843	3,087	96	813
2003	17,707	3,550	4,332	2,598	1,901	1,353	3,005	89	879
2004	14,944	2,900	3,774	2,193	1,783	1,124	2,465	79	626

Includes all citations issued by DNR staff on all lands.